



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

101642,284
IFWO
2/24/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - cPAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/642,284

DATE: 02/24/2004

TIME: 14:34:56

Input Set : A:\2004-02-18 4600-0106P.ST25.txt

Output Set: N:\CRF4\02242004\J642284.raw

3 <110> APPLICANT: KUMAGAI, Izumi et al.
 5 <120> TITLE OF INVENTION: NOVEL DIABODY-TYPE BISPECIFIC ANTIBODY
 7 <130> FILE REFERENCE: 4600-0106P
 9 <140> CURRENT APPLICATION NUMBER: US 10/642,284
 10 <141> CURRENT FILING DATE: 2003-08-18
 12 <150> PRIOR APPLICATION NUMBER: JP 2003-038643
 13 <151> PRIOR FILING DATE: 2003-02-17
 15 <160> NUMBER OF SEQ ID NOS: 40
 17 <170> SOFTWARE: PatentIn version 3.1
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 33
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Artificial Sequence
 24 <220> FEATURE:
 25 <223> OTHER INFORMATION: A NcoI-5H back primer
 27 <400> SEQUENCE: 1

W--> 28 nnnccatggc ccaggtccag ctgcagcagt ctg 33
 31 <210> SEQ ID NO: 2
 32 <211> LENGTH: 28
 33 <212> TYPE: DNA
 34 <213> ORGANISM: Artificial Sequence
 36 <220> FEATURE:
 37 <223> OTHER INFORMATION: B 5H-EagI forward primer
 39 <400> SEQUENCE: 2

W--> 40 nnncggccga ggagactgtg agagtggg 28
 43 <210> SEQ ID NO: 3
 44 <211> LENGTH: 26
 45 <212> TYPE: DNA
 46 <213> ORGANISM: Artificial Sequence
 48 <220> FEATURE:
 49 <223> OTHER INFORMATION: C EcoRV-5L back primer
 51 <400> SEQUENCE: 3

W--> 52 nnngatatcc taatgaccca atctcc 26
 55 <210> SEQ ID NO: 4
 56 <211> LENGTH: 29
 57 <212> TYPE: DNA
 58 <213> ORGANISM: Artificial Sequence
 60 <220> FEATURE:
 61 <223> OTHER INFORMATION: D 5L-SacII forward primer
 63 <400> SEQUENCE: 4

W--> 64 nnnccgcggc acgtttgatt tccagettg 29
 67 <210> SEQ ID NO: 5
 68 <211> LENGTH: 32

*mandatory, please explain
 "N" locations.
 please see
 error explanation
 on page
 7.*

**Does Not Comply
 Corrected Diskette Needed**

(pg. 1-3, 6-8)

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Input Set : A:\2004-02-18 4600-0106P.ST25.txt

Output Set: N:\CRF4\02242004\J642284.raw

69 <212> TYPE: DNA
70 <213> ORGANISM: Artificial Sequence
72 <220> FEATURE:
73 <223> OTHER INFORMATION: E NcoI-h5H back primer
75 <400> SEQUENCE: 5
W--> 76 nnnccatggc ccaggtgcaa ctggttcaga gc 32
79 <210> SEQ ID NO: 6
80 <211> LENGTH: 29
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: F h5H-EagI forward primer
87 <400> SEQUENCE: 6
W--> 88 nnnccggccga gctcacggta accagcgta 29
91 <210> SEQ ID NO: 7
92 <211> LENGTH: 23
93 <212> TYPE: DNA
94 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: G EcoRV-hOL back primer
99 <400> SEQUENCE: 7
W--> 100 nnngatatcc agatgaccca gag 23
103 <210> SEQ ID NO: 8
104 <211> LENGTH: 23
105 <212> TYPE: DNA
106 <213> ORGANISM: Artificial Sequence
108 <220> FEATURE:
109 <223> OTHER INFORMATION: H hOL-SacII forward primer
111 <400> SEQUENCE: 8
W--> 112 nnnccggcggc gggggtaatc tgc 23
115 <210> SEQ ID NO: 9
116 <211> LENGTH: 26
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: I NcoI-hOH back primer
124 <400> SEQUENCE: 9
W--> 125 nnnccatggc ccaggtgcaa ctggtg 26
128 <210> SEQ ID NO: 10
129 <211> LENGTH: 23
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: J hOH-EagI forward primer
136 <400> SEQUENCE: 10
W--> 137 nnnccggccga gctaacggtc acc 23
140 <210> SEQ ID NO: 11
141 <211> LENGTH: 26
142 <212> TYPE: DNA

Same errors

RAW SEQUENCE LISTING

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Input Set : A:\2004-02-18 4600-0106P.ST25.txt

Output Set: N:\CRF4\02242004\J642284.raw

143 <213> ORGANISM: Artificial Sequence
 145 <220> FEATURE:
 146 <223> OTHER INFORMATION: K EcoRV-h5L back primer
 148 <400> SEQUENCE: 11
 W--> 149 **nnngat**atcg tgatgaccca gagccc 26
 152 <210> SEQ ID NO: 12
 153 <211> LENGTH: 36
 154 <212> TYPE: DNA
 155 <213> ORGANISM: Artificial Sequence
 157 <220> FEATURE:
 158 <223> OTHER INFORMATION: L h5L-SacII forward primer
 160 <400> SEQUENCE: 12
 W--> 161 **nnnccg**cggc gcggttaatt tccactttgg tgccac 36
 164 <210> SEQ ID NO: 13
 165 <211> LENGTH: 27
 166 <212> TYPE: DNA
 167 <213> ORGANISM: Artificial Sequence
 169 <220> FEATURE:
 170 <223> OTHER INFORMATION: M h5H-M48I(+)
 172 <400> SEQUENCE: 13
 173 gcctggaatg gattggtaac atttacc 27
 176 <210> SEQ ID NO: 14
 177 <211> LENGTH: 27
 178 <212> TYPE: DNA
 179 <213> ORGANISM: Artificial Sequence
 181 <220> FEATURE:
 182 <223> OTHER INFORMATION: N h5H-M48I(-)
 184 <400> SEQUENCE: 14
 185 gataaatgtt accaatccat tccaggc 27
 188 <210> SEQ ID NO: 15
 189 <211> LENGTH: 21
 190 <212> TYPE: DNA
 191 <213> ORGANISM: Artificial Sequence
 193 <220> FEATURE:
 194 <223> OTHER INFORMATION: O h5H-A93T(+)
 196 <400> SEQUENCE: 15
 197 tattactgca cgcgagtg c 21
 200 <210> SEQ ID NO: 16
 201 <211> LENGTH: 21
 202 <212> TYPE: DNA
 203 <213> ORGANISM: Artificial Sequence
 205 <220> FEATURE:
 206 <223> OTHER INFORMATION: P h5H-A93T(-)
 208 <400> SEQUENCE: 16
 209 gccactgcgc gtgcagtaat a 21
 212 <210> SEQ ID NO: 17
 213 <211> LENGTH: 38
 214 <212> TYPE: DNA
 215 <213> ORGANISM: Artificial Sequence

*same error**same error*

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING

DATE: 02/24/2004

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Input Set : A:\2004-02-18 4600-0106P.ST25.txt

Output Set: N:\CRF4\02242004\J642284.raw

217 <220> FEATURE:
218 <223> OTHER INFORMATION: Q h5H-R66KR71V(+)
220 <400> SEQUENCE: 17
221 atttaagaac aaagtgacca tgacgggtga taccagca 38
224 <210> SEQ ID NO: 18
225 <211> LENGTH: 38
226 <212> TYPE: DNA
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: R h5H-R66KR71V(-)
232 <400> SEQUENCE: 18
233 tgctggtatc aaccgtcatg gtcactttgt tcttaaatt 38
236 <210> SEQ ID NO: 19
237 <211> LENGTH: 21
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: S h5H-Y27D(+)
244 <400> SEQUENCE: 19
245 gcctcaggcg atacctttac g 21
248 <210> SEQ ID NO: 20
249 <211> LENGTH: 21
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: T h5H-Y27D(-)
256 <400> SEQUENCE: 20
257 cgtaaaggta tcgcctgagg c 21
260 <210> SEQ ID NO: 21
261 <211> LENGTH: 35
262 <212> TYPE: DNA
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: U h5H-M69LT73R(+)
268 <400> SEQUENCE: 21
269 caaagtgacc ctgacggttg atcgagcat ttcga 35
272 <210> SEQ ID NO: 22
273 <211> LENGTH: 35
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: V h5H-M69LT73R(-)
280 <400> SEQUENCE: 22
281 tcgaaatgct gcgatcaacc gtcagggtca ctttg 35
284 <210> SEQ ID NO: 23
285 <211> LENGTH: 30
286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 02/24/2004

PATENT APPLICATION: US/10/642,284

TIME: 14:34:56

Input Set : A:\2004-02-18 4600-0106P.ST25.txt

Output Set: N:\CRF4\02242004\J642284.raw

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290 <223> OTHER INFORMATION: W h5H-I75SS76RA78V(+)
292 <400> SEQUENCE: 23
293 gataccagca gtcgcacggt ctatatggaa          30
296 <210> SEQ ID NO: 24
297 <211> LENGTH: 30
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial Sequence
301 <220> FEATURE:
302 <223> OTHER INFORMATION: X h5H-I75SS76RA78V(-)
304 <400> SEQUENCE: 24
305 ttccatatag accgtgcgac tgctggtatc          30
308 <210> SEQ ID NO: 25
309 <211> LENGTH: 354
310 <212> TYPE: DNA
311 <213> ORGANISM: Mouse
313 <220> FEATURE:
314 <221> NAME/KEY: CDS
315 <222> LOCATION: (1)..(354)
316 <223> OTHER INFORMATION: 5H
318 <400> SEQUENCE: 25
319 cag gtc cag ctg cag cag tct ggg tct gag atg gcg agg cct gga gct          48
320 Gln Val Gln Leu Gln Gln Ser Gly Ser Glu Met Ala Arg Pro Gly Ala
321 1          5          10          15
323 tca gtg aag ctg ccc tgc aag gct tct ggc gac aca ttc acc agt tac          96
324 Ser Val Lys Leu Pro Cys Lys Ala Ser Gly Asp Thr Phe Thr Ser Tyr
325          20          25          30
327 tgg atg cac tgg gtg aag cag agg cat gga cat ggc cct gag tgg atc          144
328 Trp Met His Trp Val Lys Gln Arg His Gly His Gly Pro Glu Trp Ile
329          35          40          45
331 gga aat att tat cca ggt agt ggt ggt act aac tac gct gag aag ttc          192
332 Gly Asn Ile Tyr Pro Gly Ser Gly Gly Thr Asn Tyr Ala Glu Lys Phe
333          50          55          60
335 aag aac aag gtc act ctg act gta gac agg tcc tcc cgc aca gtc tac          240
336 Lys Asn Lys Val Thr Leu Thr Val Asp Arg Ser Ser Arg Thr Val Tyr
337 65          70          75          80
339 atg cac ctc agc agg ctg aca tct gag gac tct gcg gtc tat tat tgt          288
340 Met His Leu Ser Arg Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
341          85          90          95
343 aca aga tcg ggg ggt ccc tac ttc ttt gac tac tgg ggc caa ggc acc          336
344 Thr Arg Ser Gly Gly Pro Tyr Phe Phe Asp Tyr Trp Gly Gln Gly Thr
345          100          105          110
347 act ctc aca gtc tcc tcc          354
348 Thr Leu Thr Val Ser Ser
349          115
352 <210> SEQ ID NO: 26
353 <211> LENGTH: 342
354 <212> TYPE: DNA
355 <213> ORGANISM: Mouse
357 <220> FEATURE:

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/642,284

DATE: 02/24/2004
TIME: 14:34:57

Input Set : A:\2004-02-18 4600-0106P.ST25.txt
Output Set: N:\CRF4\02242004\J642284.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 1,2,3
Seq#:2; N Pos. 1,2,3
Seq#:3; N Pos. 1,2,3
Seq#:4; N Pos. 1,2,3
Seq#:5; N Pos. 1,2,3
Seq#:6; N Pos. 1,2,3
Seq#:7; N Pos. 1,2,3
Seq#:8; N Pos. 1,2,3
Seq#:9; N Pos. 1,2,3
Seq#:10; N Pos. 1,2,3
Seq#:11; N Pos. 1,2,3
Seq#:12; N Pos. 1,2,3

VARIABLE LOCATION SUMMARY

PATENT APPLICATION: US/10/642,284

DATE: 02/24/2004

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Input Set : A:\2004-02-18 4600-0106P.ST25.txt

Output Set: N:\CRF4\02242004\J642284.raw

Use of n's or Xaa's (NEW RULES):*Error Explanation:*

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:1; N Pos. 1,2,3

Seq#:2; N Pos. 1,2,3

Seq#:3; N Pos. 1,2,3

Seq#:4; N Pos. 1,2,3

Seq#:5; N Pos. 1,2,3

Seq#:6; N Pos. 1,2,3

Seq#:7; N Pos. 1,2,3

Seq#:8; N Pos. 1,2,3

Seq#:9; N Pos. 1,2,3

Seq#:10; N Pos. 1,2,3

Seq#:11; N Pos. 1,2,3

Seq#:12; N Pos. 1,2,3

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/642,284

DATE: 02/24/2004

TIME: 14:34:57

Input Set : A:\2004-02-18 4600-0106P.ST25.txt

Output Set: N:\CRF4\02242004\J642284.raw

L:28 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:1 ✓
L:28 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:1 ✓
L:28 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:40 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:2 ✓
L:40 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:2 ✓
L:40 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:52 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:3 ✓
L:52 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:3 ✓
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:64 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:4 ✓
L:64 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:4 ✓
L:64 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:76 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:5 ✓
L:76 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:5 ✓
L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:88 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:6 ✓
L:88 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:6 ✓
L:88 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:100 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:7 ✓
L:100 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:7 ✓
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:112 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:8 ✓
L:112 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:8 ✓
L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:125 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:9 ✓
L:125 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:9 ✓
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:137 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:10 ✓
L:137 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:10 ✓
L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:149 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:11 ✓
L:149 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:11 ✓
L:149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:161 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:12 ✓
L:161 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:12 ✓
L:161 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0